Product Name: NIPP1 Rabbit Polyclonal Antibody
Catalog #: APRab14710

Summary

Production Name	NIPP1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	PPP1R8
Alternative Names	PPP1R8; ARD1; NIPP1; Nuclear inhibitor of protein phosphatase 1; NIPP-1; Protein phosphatase 1 regulatory inhibitor subunit 8
Gene ID	5511.0
SwissProt ID	Q12972.The antiserum was produced against synthesized peptide derived from human PPP1R8. AA range:196-245

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:20000
Molecular Weight	40kD

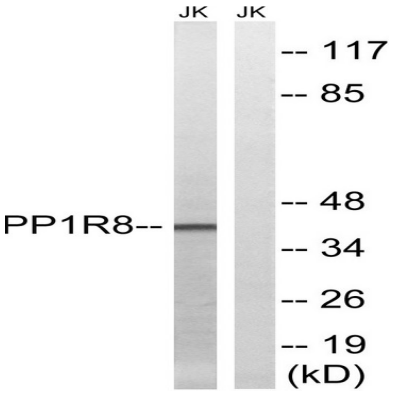
Product Name: NIPP1 Rabbit Polyclonal Antibody
Catalog #: APRab14710

Background

This gene, through alternative splicing, encodes three different isoforms. Two of the protein isoforms encoded by this gene are specific inhibitors of type 1 serine/threonine protein phosphatases and can bind but not cleave RNA. The third protein isoform lacks the phosphatase inhibitory function but is a single-strand endoribonuclease comparable to RNase E of E. coli. This isoform requires magnesium for its function and cleaves specific sites in A+U-rich regions of RNA. [provided by RefSeq, Jul 2008],cofactor:Magnesium. Endoribonuclease function is magnesium-dependent.,domain:Has a basic N- and C-terminal and an acidic central domain.,function:Inhibitor subunit of the major nuclear protein phosphatase-1 (PP-1). It has RNA-binding activity but does not cleave RNA and may target PP-1 to RNA-associated substrates. May also be involved in pre-mRNA splicing. Binds DNA and might act as a transcriptional repressor. Seems to be required for cell proliferation.,function:Isoform Gamma is a site-specific single-strand endoribonuclease that cleaves single strand RNA 3' to purines and pyrimidines in A+U-rich regions. It generates 5'-phosphate termini at the site of cleavage. This isoform does not inhibit PP-1. May be implicated in mRNA splicing.,miscellaneous:A synthetic peptide, NIPP-1(330-351), is able to inhibit PP-1. Phosphorylation of Tyr-335 reduces PP-1 inhibition, whereas phosphorylation of Thr-346 or Ser-348 has no effect.,PTM:May be inactivated by phosphorylation on Ser-199 or Ser-204 (By similarity). Phosphorylated by Lyn in vitro on Tyr-264, and also on Tyr-335 in the presence of RNA.,similarity:Contains 1 FHA domain.,subcellular location:Found mainly in the cytoplasm.,subcellular location:Primarily, but not exclusively, nuclear.,subunit:Interacts with phosphorylated CDC5L, SF3B1 and MELK. Interacts with EED, in a nucleic acid-stimulated manner. Part of a complex consisting of PPP1R8, EED, HDAC2 and PP-1. Part of the spliceosome.,tissue specificity:Ubiquitously expressed, with highest levels in heart and skeletal muscle, followed by brain, placenta, lung, liver and pancreas. Less abundant in kidney. The concentration and ratio between isoforms is cell-type dependent. Isoform Alpha (>90%) and isoform Beta were found in brain, heart and kidney. Isoform Gamma is mainly found in B-cells and T-lymphocytes, and has been found in 293 embryonic kidney cells.,

Research Area

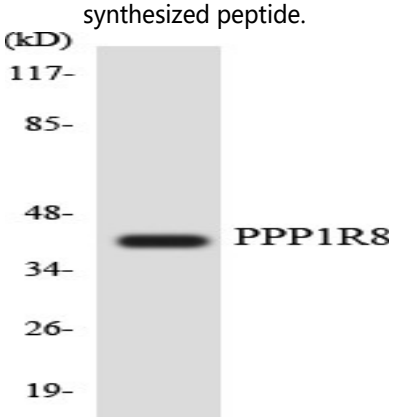
Image Data



Western blot analysis of lysates from Jurkat cells, using PPP1R8 Antibody. The lane on the right is blocked with the

Product Name: NIPP1 Rabbit Polyclonal Antibody
Catalog #: APRab14710

synthesized peptide.



Western blot analysis of the lysates from HUVECcells using PPP1R8 antibody.

Note

For research use only.